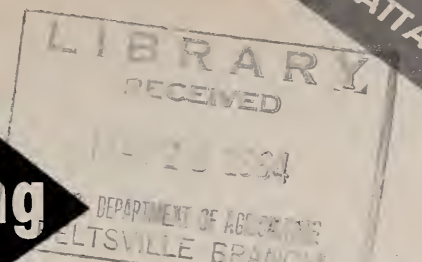


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Featuring
ATTACK ON POVERTY

**YOU
CAN'T
TEACH
A HUNGRY
CHILD**





Volume 9, Number 5

ORVILLE L. FREEMAN
Secretary of Agriculture

S. R. SMITH, Administrator,
Agricultural Marketing Service

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May 1964

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Cover Page

This little girl in eastern Kentucky typifies the many children in needy areas, who, for the first time this past winter, had hot lunches at school. In today's war on poverty, the Agricultural Marketing Service is increasingly pressing USDA-donated foods into service wherever they're needed—in schools, in non-profit institutions, to needy families, to victims of hurricanes, floods, earthquakes, and the like.

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AGRICULTURAL MARKETING is published monthly by the Agricultural Marketing Service, United States Department of Agriculture, Washington, D. C. 20250. The printing of this publication has been approved by the Bureau of the Budget, March 18, 1959. Yearly subscription rate is \$1.50, domestic; \$2.25 foreign. Single copies are 15 cents each. Subscription orders should be sent to the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.



AMS and the Poverty War

THE U. S. Department of Agriculture has thrown the full resources of its agencies into a two-phased drive against poverty. In one phase USDA is attacking the causes of poverty, helping to create new economic opportunities and new jobs in rural America where 16 million of the 35 million poverty-stricken live. In this phase USDA is making loans—for housing construction and repairs, for recreation enterprises to boost rural income and provide outlets for city dwellers, for development of water systems and of forest and soil resources, for electric and telephone systems. USDA is providing jobs—through construction work on flood prevention projects, through Accelerated Public Works activity in the National Forest, through construction work on homes and facilities financed by USDA loans, and through new industries attracted to rural areas by Rural Areas Development projects.

In the other phase of its attack on poverty USDA is using one of the basic weapons available to the country—food. As everyone knows, feeding hungry people is no cure for poverty but it does accomplish the all-important task of helping the destitute remain healthy so that when the time does come they will be able to avail themselves of opportunities to develop and use their capacities.

Distributing America's food abundance to such helpless people and to others has long constituted a major part of the work of USDA's Agricultural Marketing Service. The AMS food distribution operation is currently being conducted on three major fronts. USDA-donated foods have played a monumental role in sustaining the needy whom fortune has bypassed, or the dispossessed whose homes and other belongings have been swept away by floods or storms.

On another food front low-income families in 43 selected areas of the country are shopping a new way through an AMS-administered project—the Food Stamp Program. They are shopping with coupons, instead of cash, buying with Government help a greater variety of foods that improve their diets.

On the third AMS food front, school lunch, an oldtimer on the American educational scene, is being channeled in increasing tempo to schools which heretofore have been unable to afford it. Impoverished children pay whatever they can, or nothing. From one-room schools in remote rural areas to big-city schools in poor neighborhoods, children from needy homes are receiving their first lunch at school—often their only real meal of the day. Kansas City, Missouri, recently inaugurated breakfasts for some of its needy students.

The greater part of this issue is devoted to an explanation of the nature, scope and relevance of AMS' activities on these three food distribution fronts.

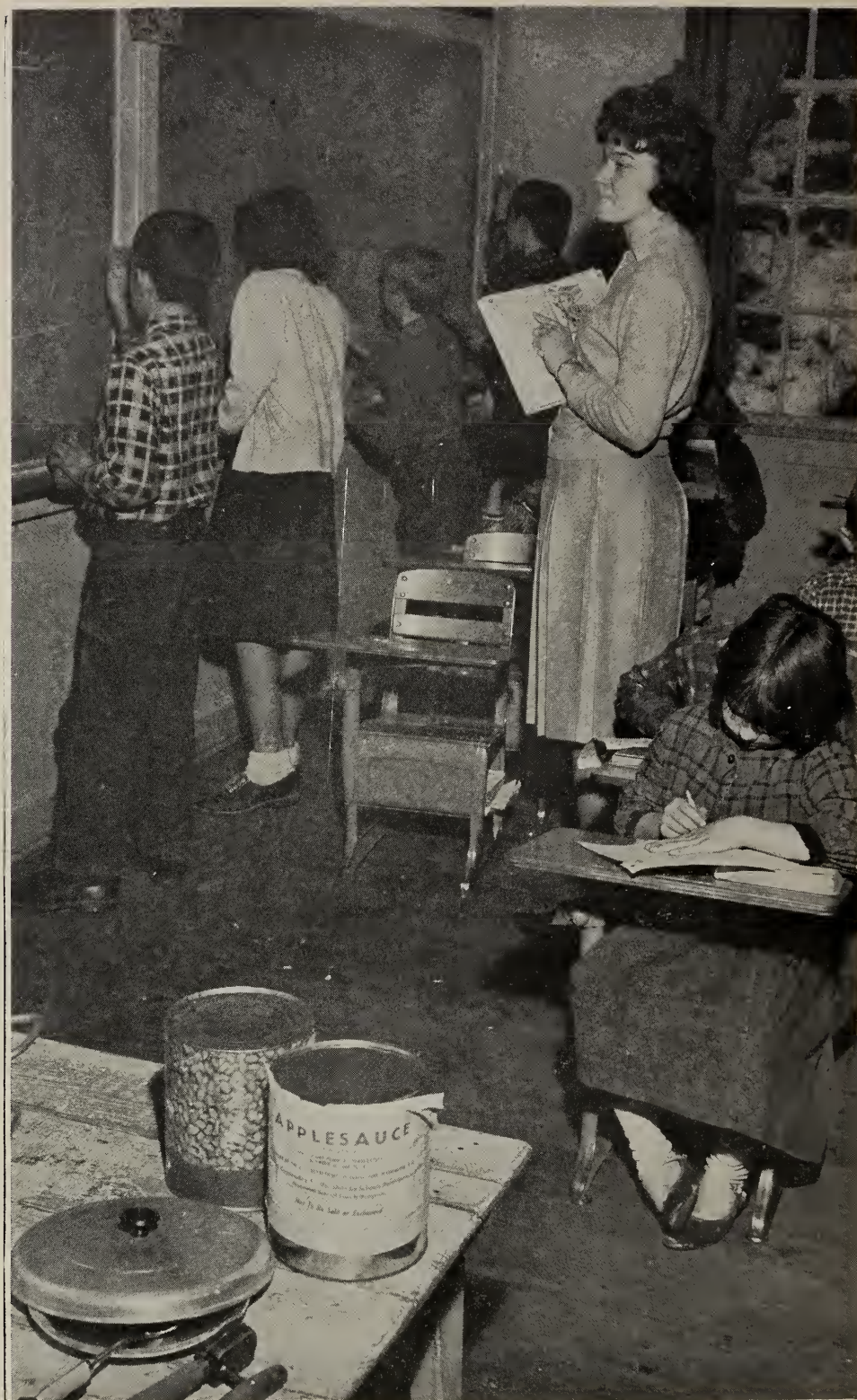
You Can't Teach A Hungry Child

“YOU can't teach a hungry child,” say educators again and again, commenting on their work with children from poverty-stricken homes. Yet getting an education is the one chance for many a needy youngster to better his lot and become a job-holding, self-supporting citizen.

Even one good meal a day—lunch at school—makes a tremendous difference in a child's mental and physical alertness, teachers report. Today, many schools are providing that all-important good meal as a vital part of the school day. The National School Lunch Program, during its 18 years of operation, has been an important factor in helping improve the nutrition of the Nation's school children; and thus has come to be an important phase of the total educational process.

In schools taking part in the lunch program, children who cannot afford to pay for lunch are eligible to receive it free or at reduced cost. Today, of the 16 million youngsters getting hearty lunches at school, about 10 percent pay little or nothing because of need.

In most communities, the cost of providing a few needy children with free or reduced-cost school lunches can be absorbed by the total operating fund, about 60 percent of which comes from children's payments. But there are many schools located in areas of poor economic conditions having very high proportions of children who cannot afford to pay. In such areas, the



AMS is expanding the school lunch program to include such "pockets of need" as this one-room school in Amba, Ky., where lack of facilities and economic resources had formerly not permitted food services. In especially needed areas, children pay whatever they can for the lunch—even nothing. Here, while lunch is being prepared, the three R's are not at all neglected.



In hard-to-reach, remote schools, food is often carried long distances from the road to the school.

normal local, State and Federal aid is not always adequate to meet the need for free lunches. Under these circumstances it is virtually impossible to finance a school lunch program without special help from outside the community.

Now more and more schools like these are undertaking lunch service, using special assistance available from the U. S. Department of Agriculture and State and local officials.

This winter, as part of the nationwide attack on poverty, almost 7,500 youngsters in remote one- and two-room eastern Kentucky schools had their first complete lunches at school—similar to the nutritious Type A meals served in modern city and suburban schools. Also twenty-four schools in the lowest income area of Louisville are receiving special cash assistance to provide lunches to nearly 6,000 children.

Other southeastern States including Tennessee, Georgia, Virginia, Alabama and Florida are also making rapid strides in their special efforts to make school lunches available to needy schools serving nearly 300,000 children. The children pay what they can—a dime, a nickel, a penny—or nothing. In one school of 27 children, only one child can afford to pay anything—a dime.

Out of its regular allotment of National School Lunch funds from USDA, the State is allowing up to a maximum of 15 cents per lunch to





USDA-donated food is not all it takes to make school lunch possible in especially needy areas. Women donate their time and cooking skills, others donate equipment. This is necessary because Federal and State assistance is concentrated on food. Labor, equipment, and the like would ordinarily be purchased with money paid by the children for food. But in one Ky. school of 27 pupils, only one pupil can pay anything—a dime, the rest can pay nothing.

these needy schools, to be used in buying bread, milk and fresh produce. The national average cash reimbursement to schools—including many in other parts of Kentucky—is about 4.5 cents per lunch. This extra money, along with USDA-donated canned meats, chicken, peanut butter, cheese and butter takes care of the food needs for the youngsters.

But food is only the first problem. Many of the remote schools are situated beyond adequate roads and lack food storage, preparation and serving equipment. Enrollments range as low as 10 or 12 children, and the wooden or concrete block buildings generally are heated by old fashioned "pot-belly" stoves. In most areas water is carried from an outside well or even a nearby farmhouse. Many of the schools however, do have electricity.

With these handicaps, much planning was required before lunch service could begin in many schools. School lunch personnel of USDA's Agricultural Marketing Service, cooperating with the State's School Lunch Division, worked out menus including such foods as canned meats, fruits and vegetables that can be heated on hot plates donated by public agencies and citizens' groups and students.

In many cases, the teacher picks up bread and milk on the way to school in the morning, and teacher and students together prepare and serve lunch. At one school, the older boys lug the milk the 2½ miles from the road to the school every morning. In some schools paper plates and plastic knives and forks are used, but most often the students bring their own eating utensils from home—usually a plate, cup and spoon, which in some instances they must take home to be washed. Sometimes the food is prepared at a nearby home or the nearest large school and transported in by teachers or parents. At very small schools, the children may go as a group to a nearby home for lunch. A typical noon meal includes canned pork, green beans, peaches, bread and butter and milk.

As far North as Alaska, Federal Bureau of Indian Affairs officials in cooperation with the State Department of Education and USDA extended the school lunch program to 34 remote schools, including over 4,600 Indian children.

In the Nation's Capital, about 8,000 needy children in District of Columbia elementary schools are provided free lunches daily. All elementary school children in the District receive free milk daily under the Special Milk Pro-

gram. Benefits have also been extended to about 1,750 homeless children in Junior Village and the District's Children's Center.

New York City elementary schools serve an average of 55 percent of their school lunches to needy children at no charge, making a total of 158,000 free lunches every day of the school year. Junior high schools serve 34,770 free lunches daily and senior high schools, 6,770. The New York City Board of Education also sponsors a free lunch program for needy youngsters during the summer months and the Christmas holiday recess. State and city welfare departments share the additional cost of providing these free lunches along with free milk for 71,960 children.

In Pike County, Ohio, there are three school districts in which 80 percent of the school children come from families on public assistance. These schools are now using special assistance from State and Federal governments to provide school lunches for these needy youngsters.

In addition to school lunches, Kansas City, Missouri, school officials have started breakfast programs for needy children in two predominantly Negro schools and in one school drawing most of its attendance from a Mexican community.

Espada Mission School officials in San Antonio, Texas, report an 11 percent improvement in average daily attendance since the inauguration of their program. This program, too, was made possible through maximum assistance from Federal funds and donated foods.

Colorado and New Mexico school officials overcame many unique problems in establishing school feeding programs in isolated schools in mountainous areas. Colorado officials as well as those of New Jersey and many other States are devoting special attention to the problems and food needs of children of migrant agricultural workers.

Many of these schools offering free or reduced-price lunches to needy children also provide extra milk at little or no cost. Nationally, this is known as the Special Milk Program, designed to help schools supply children with extra milk, over and above that served with each school lunch. In especially needy schools needy children who cannot pay get their milk free.

The milk program also operates for the benefit of children in child-care institutions, settlement houses, summer camps and schools that are without lunch programs. Under the program about 2.9 billion half-pints of milk will be consumed by children this year.



Children above are washing up for lunch in this one-room school which also serves as lunchroom and kitchen. The teacher below gets a helping hand from pupils.



Food Stamps Revisited

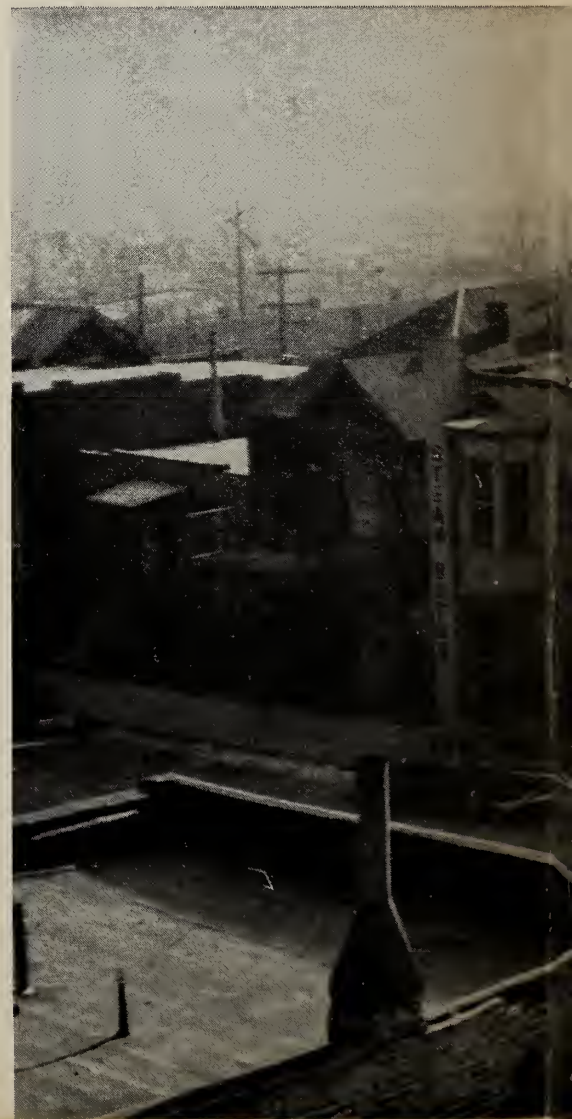
Editor's Note:

In June 1961, Silver Bow County, Montana, was one of eight areas in which the U.S. Department of Agriculture began testing a new method of helping low-income families attain better diets through a food stamp coupon plan aimed at expanding markets for farm foods. Administered by the Agricultural Marketing Service's Food Distribution Division, the Pilot Food Stamp Program was extended in fiscal years 1963-64 to an additional 36 areas.

Under the plan, persons declared eligible by local welfare agencies put in approximately \$6.00 of their own money on an average to receive \$10.00 worth of coupons. The coupons are spent like money at authorized retailers for any food, except a few imported items. The \$4.00 "bonus" represents additional food-purchasing power to the family, new money in the community, and more food sales for farmers and the food industry.

The following article is a progress report on the project after 30 months of operation.

Hoists for lowering miners underground



BUTTE, Montana, is a mining city. It sits in a small crook of the Rocky Mountains that sprawl down into Montana from Canada. It is high, a mile above sea level, and the wind in winter is biting and cold. The hills were pumped full of copper eons ago, solidifying into one of the world's richest ore deposits.

Hoists for putting miners underground and for hauling copper ore to the surface dot the skyline of Butte. Properly, they are termed headframes, but the local people refer to them as "gallows frames." They are a visual reminder of the earlier, rowdier frontier days and of better times when all operations were conducted in mines that went deep and were laden with highest grade ore.

But things have not gone well in Butte lately. The copper ore is neither as plentiful or as rich as it once was.

Unsettled economic conditions, cutbacks in copper productions, strikes, uncertainties in the metal market, and the resultant unemployment have made dents in the town's social and economic structure.

Miss Josephine McArthur, Administrator of the Silver Bow County Wel-

fare Department briefly summed up the situation by saying: "Everything in Butte is geared to the mines. When they go, everything goes. The Welfare Department flourishes then."

A curtailment of copper production accounted for an initial surge in unemployment in 1957. Later, the longest strike in the town's history lasted from August of 1959 to February of 1960. In December 1960, 1,850 men or 12.1% of the total work force, were unemployed. Since then, the labor force and labor market have fluctuated constantly.

The USDA food stamp office is located in the middle of the downtown area, on Broadway Street, a long, gritty street parallel to Park Street, the main East-West thoroughfare. From her office Mrs. Verena Hatch can see the Flat, the South Side, and a part of Butte's East Side. The Flat has many homeowners, the East Side many temporary inhabitants, and the South Side is mixed in its economic structure.

Mrs. Hatch is a native of Butte, but has worked in much of the West.

"You can see the care in people's faces here," she points out. "They say things are better, but when you've spent most of your life here you can tell.

When you see all the houses for rent and all the empty homes, it looks like things have gone down. They're supposed to be better. I don't know. Where have all the people gone?"

There is a large interstate highway being built in the eastern part of town, and new shopping centers point to an upsurge in the economics of Butte. A new concentrator for processing copper ore is almost completed. These activities have provided new jobs and perhaps new hope.

Tom Powers, an East Side grocer, agrees that conditions aren't the best, but he believes the food stamp program is taking care of many problems that would otherwise be insurmountable.

"Anybody in Butte will tell you the program's wonderful," he says. "Fortunately, it's helping people who need help. The stamps give 'em a boost. A lot of them have kids, too.

"Take this little guy down the street. He came to town, heard there was work and got a job in one of the holes. Then the very first week he busted his hand and couldn't work.

"I sent him down to check on stamps and he got on. Or, you take some guy

ground are visual reminders in Butte of better days when mines went deep and were laden with highest grade ore.





Under the Food Stamp Plan Program, eligible families shop with coupons just as they would with cash. They pay an average of \$6 for \$10 worth of coupons. Participant above pays cash for nonfood items and imported food items such as bananas and coffee since coupons can not be used under the Program to purchase these products.

who's a day's pay miner with thirteen or fourteen kids, he's going to have a lot of trouble keeping them fed. He can get stamps without going on welfare. Miners are proud, you know," Tom insists.

Mrs. Dolores Guay is a widow with nine children. She has participated in the program periodically for two years, and was recently re-certified.

"I get \$222 a month in Social Security," she reports, and "that extra \$60 bonus sure comes in handy. It keeps us eating. I don't know what I'd do without the stamps.

Mrs. Guay is pleased with the local welfare office's handling of food stamp coupons. They are issued once a month and she is able to take advantage of all the monthly special sales. Additionally, the pamphlets and other information distributed have helped her plan meals better, and stretch food money further.

Mrs. Anna Brady is a disabled widow, dependent entirely upon public assistance. She has been in the stamp program since it began in 1961.

"Food stamps are a blessing. Otherwise I couldn't keep going," she says.

The added food-buying power of the coupons she finds excellent. "I can afford all sorts of things now that I couldn't when I was receiving donated commodities. And I buy good, solid food like vegetables and meat . . ."

S. I. (Ivan) Briggs runs and owns a small supermarket on the Flat. He is a strong, energetic man who was intimately involved in the organization of the program in Butte. Ivan probably has less food stamp trade than any other grocer in Butte, because his market is located in a largely professional class area. But he finds that stamps are a boon to the town.

"As a matter of fact," he says, "the people who come here regularly with stamps use two baskets—one for food, another for ineligible items. It's a help during weekends when we're busiest."

Food stamp participation varies seasonally. In winter, and when forest work is slow, many loggers live in Butte. Many of them become food stamp participants, but not all eligible persons are participating in the program.

Miss McArthur of the Welfare De-

partment, Ivan Briggs, and Tom Powers have all noted that participation is dependent upon the unemployment situation in town. When employment is up, food stamp participation is down. Miss McArthur is especially pleased with the program. "It's all good for Butte. The extra food money that comes in is, by and large, money that stays in the community. It's a great help locally."

In February 1963, the high point in participation for that calendar year, a total of 1,453 persons were taking advantage of the program.

These participation figures show a considerable leveling off from comparable figures for 1962, at the peak of which there were 2,381 participants.

The total stamp purchases for that year were \$300,781 with an additional \$139,915 spent for bonus coupons.

In the 2½ years during which AMS has been conducting its Pilot Food Stamp Program in Butte, recipients, grocers, public welfare personnel, and others interested in the economic development of Butte have been well pleased.

Food When It's Needed

AN UNEMPLOYED coal-miner in Appalachia . . . a migrant farm hand awaiting a delayed harvest in Texas . . . a disabled wage-earner anywhere . . . an automobile worker suffering temporary lay-off in Indiana . . . a youngster eating lunch at school . . . and a family suddenly left homeless by an Ohio River flood.

Those are some of the 25 million Americans who benefit from foods donated by the U.S. Department of Agriculture's Agricultural Marketing Service to cooperating public agencies in all the States and territories. The donated foods are distributed regularly to schools, charitable institutions and needy families, and the stocks in the "pipeline" to such outlets are always immediately made available to help feed victims of natural disasters.

Now, in today's war on poverty, donated foods are being increasingly pressed into service, first, to alleviate immediate hunger in desperate pockets of need; beyond that, these foods are helping to provide young people at school with the nourishment and will to strive for the learning and training they need to break the bonds of poverty.

USDA-donated foods are always available for use in such emergencies as this recent flood in Grand View, Indiana.





The intensive efforts that began last fall to help people in the severely-depressed Appalachian area of eastern Kentucky illustrate the approach that is needed in the broader war on poverty. Of the 44 counties in eastern Kentucky, 40 already had food programs—37 distributing donated foods to needy families and three operating pilot food stamp programs. Limited local resources had precluded the remaining four counties from undertaking the expense of transporting and distributing foods. However, the call from President Lyndon B. Johnson and Secretary of Agriculture Orville L. Freeman for “redoubled efforts” to feed hungry people during the winter months sparked a Federal-State drive that resulted in full distribution to some 12,000 persons in those four counties, beginning in December.

All across the country, State Governors and welfare staffs took a closer look at the ways in which donated foods from USDA can be used, both to feed needy families and to help provide lunches at schools that lack facilities and resources. In the family donation activity alone, 65 counties started distributing foods in the late fall, with 18 of them entering the program for the first time. In addition, similar programs were started in 29 towns in four New England States and in 25 additional townships in Indiana. While

some counties normally suspend winter distribution operations each spring, AMS Food Distribution Division field offices continue to report new additions to the program, and more in the planning stages.

Children in needy areas who have never been able to enjoy hot lunches at school are increasingly being provided for, with the combined help of donated foods and increased cash allowances under the National School Lunch Act. During the past winter in eastern Kentucky alone, nearly 7,500 youngsters in over 285 especially needy schools ate lunch at school for the first time.

The direct distribution of foods acquired in surplus-removal and price-support operations is unique among the world's governments, the majority of which are concerned with overcoming food shortages rather than sharing food abundances. It's a measure of the productivity of American farmers that not only does this Nation have extra food to help schools operate lunch services and to feed needy people in our own country, but enough left over to help do the same for over 100 friendly countries around the world.

Basically, the authorization to acquire “surplus” farm products and distribute them to eligible users is nearly 30 years old, contained in Section 32

Along with the distribution of USDA-donated foods come demonstrations showing people all over the country how to make the best and most nutritious use of these foods and add more variety to meals. The lady above demonstrates her culinary skills with donated foods. Below, left, an employee of a local food distribution center in San Antonio, Texas, demonstrates various usages and the lady translates into Spanish.



of the Act of August 24, 1935. Since then other pieces of legislation have broadened the scope of food distribution activities.

Through the late 1930's distribution of surplus removal commodities was made, as it still is, with the cooperation of State and local welfare agencies. The war years of the early 40's brought an end to the need for large-scale surplus removal operations, and an end, too, to any significant need for food assistance at home. In the immediate post-war period, the term "food shortage" was more frequently heard than "surplus."

But American farmers, spurred by the war effort, had created a national agricultural production mechanism that couldn't be turned off like a weapons factory, and by 1949 Congress again felt the need for legislation to find new outlets for farm products that couldn't be sold in regular marketing channels.

Result was Section 416 of the Agricultural Act of 1949, which spells out the categories of eligible domestic and foreign recipients for price-support commodities of which supplies remain after sales and barter efforts have been exhausted. Schools, non-profit summer camps, American Indians, and needy persons, and charitable institutions receive available foods. Section 416 also provides that stocks remaining after all the domestic categories have been supplied are to be made available for donation overseas through recognized voluntary welfare and church groups.

A significant amendment to Section 416 was passed in 1955, authorizing the Secretary of Agriculture to pay for the cost of processing and packaging price-support items into forms suitable for home, school and institutional use. Raw wheat and corn, for example, are transformed into such foods as flour, bulgur, cereal, meal and grits.

Thus, at mid-century the stage was set to make more effective use of America's farm abundances for the benefit of all citizens, regardless of their economic circumstances. And, through the 50's, State-by-State and county-by-county development of a distribution system moved forward as State and local authorities provided the personnel, the facilities and the finances necessary to getting USDA foods into the kitchens of schools and institutions and onto the tables of needy families.

Impetus to the development of this distribution system came in January 1961, when the late President Kennedy in his first executive order called for a greater variety of donated foods, and

urged increased efforts to reach needy families. As a result, the number of commodities and recipients was doubled in the ensuing months.

The USDA Direct Distribution Program is dependent upon the close cooperation of State, county and local workers to be effective. The Department's role is clearly defined by Congress—to donate foods from Government inventory and to purchase additional commodities that may be surplus. The food is shipped to the States, and there it becomes the responsibility of appropriate State and local public agencies to handle, store, determine eligibility of applicants, and distribute the commodities.

The number of people in family units receiving donated foods varies considerably from month to month, and over the past year ranged from a high of 7 million in February 1963 to a low of 5.2 million during the late summer. Annually, food donations for needy persons now exceed one billion pounds. A decade ago, slightly more than one million needy persons received a total of 37,500,000 pounds.

But whether a lot of food is needed, or an expanding economy reduces that need, the Federal-State-local distribution machinery built on years of experience stands ready to assure people everywhere that they need not go hungry in this Nation of abundance.

Taking Stock of Our National Refrigerator

BACON and eggs for breakfast. Sounds like a simple order until you stop to think of all the marketing information needed to get these items onto your table.

We're able to enjoy a wealth of perishable foods the year round, the country over, because cold storage warehousesmen keep them fresh until they are moved to the local grocery store. You can buy bacon and eggs, meats or fruits or frozen vegetables because marketers are aware of the supply and demand for these perishable foods.

An invaluable source of information on supplies of these foods is the monthly *Cold Storage Report* of the United States Department of Agriculture. The *Report* informs everyone in the perishable foods industry—from the farmer to the neighborhood grocer—of the movement of various crop and livestock products into and out of cold storage.

What volume of goods is being carried into a new season and how fast new stockpiles are building up are shown in the *Report*. In addition, it shows the utilization of the existing 406 million cubic feet of cooler and freezer rooms in public refrigerated warehouses.

This year the *Cold Storage Report* is celebrating its fiftieth year of publication. When the first *Report* appeared in 1914, one of its reasons for

existence was to reassure the public that the cold storage warehouses were not being used for "cornering supplies" and squeezing customers, as some critics implied. In that first issue only one commodity was surveyed—apples.

It wasn't until 1916 that cold storage reporting got under way full scale. By then the need was apparent for a periodical report to help promote an orderly and efficient system for marketing perishable foods.

By 1916 the list of commodities in the *Report* was enlarged to include creamery butter, shell eggs, American cheese, frozen and cured beef, lamb, mutton, pork, and lard. Today it contains 84 classifications of foodstuffs in storage.

Some 3,000 warehouses around the country cooperate with USDA's Statistical Reporting Service which tabulates and compiles these data for the *Report*. All the figures are submitted voluntarily by public, private, and semiprivate cold storage plants. Included are meat packers, apple houses—in fact, all types of refrigerated facilities in which products are held for 30 days or more.

This may seem like a lot of trouble just so you can have your bacon and eggs and it is. In the highly competitive industry of perishable food production and distribution, knowing the answers about supply is a "must."



Workers above are using better packaging and handling methods which, along with better transportation, have continuously upgraded the quality of fresh tomatoes. They're

putting small tomatoes at the ends, large ones in center, for protection against bruising. Practices recommended could net great savings.

Repacking Tomatoes

FEW people can remember when tomatoes were available only seasonally. A plentiful year-round supply of fresh, top-quality tomatoes is as distinctive a feature of the 20th century as television and space exploration. Better packaging, handling, and transportation have continuously upgraded the quality of fresh tomatoes available to consumers the year round and, equally important, have reduced or held down prices when the cost of nearly everything else has risen.

Although the revolution in marketing and handling fresh tomatoes started many years ago, the end is not yet in sight. For example, marketing researchers in the Agricultural Marketing Service of the U. S. Department of Agriculture are studying weigh-filling machines for use at shipping points, and new packaging techniques that may improve tomatoes' protection from bruising, and facilitate easier handling.

In a recently completed study of the

repacking and handling of green tomatoes destined for the fresh produce counters of retail stores, marketing researchers found a number of immediate improvements that could be made to reduce both costs and bruising of tomatoes. Adoption of the improvements could result in savings of as much as 10 to 40 percent in repacking costs, depending on the system used. In some instances, repacking costs could be reduced as much as \$3 per 1,000 pounds of tomatoes. In addition, the tomatoes receive greater protection from bruising when they're packed according to the methods recommended by the marketing researchers.

The findings from this study are useful to plants of various capacities. Specific figures and recommendations are given for plants handling 1½, 3, 5, and 10 million pounds of tomatoes annually, and could be adapted to plants of other capacities. In addition to the cost figures, the recommenda-

tions give details for the most efficient organization of workers and work stations, and kinds of equipment for various operations.

The most efficient sorting system studied costs, for first sorting, about \$1.25 per 1,000 pounds of tomatoes, a lower figure than many handlers now achieve with their present systems of operation. The costs included in this study cover labor and equipment requirements. For a second sorting, costs range from a low of about \$1.75 to a high of about \$3.50 per 1,000 pounds, depending on the system used.

The equipment used in the most efficient sorting operation includes four-lane roller tables. Marketing researchers also recommend 125 to 800 pallets and two electric pallet transporters for greatest efficiency in plants ranging from a capacity of 1½ through 10 million pounds of tomatoes annually. This combination of equipment, with a 10-man sorting crew, provides the fastest

operation, gives the most even workload distribution, and requires the least handling—an important point in reducing bruising of tomatoes.

The most efficient repacking operation employed separate crews for sizing, sorting, and packing the tomatoes in trays—the most common container used in the plants studied by the researchers. Roller-belt sorting tables and divided packing bins, employing 17 workers, were used in the packing operation. With this system, 3,870 pounds of tomatoes could be packed

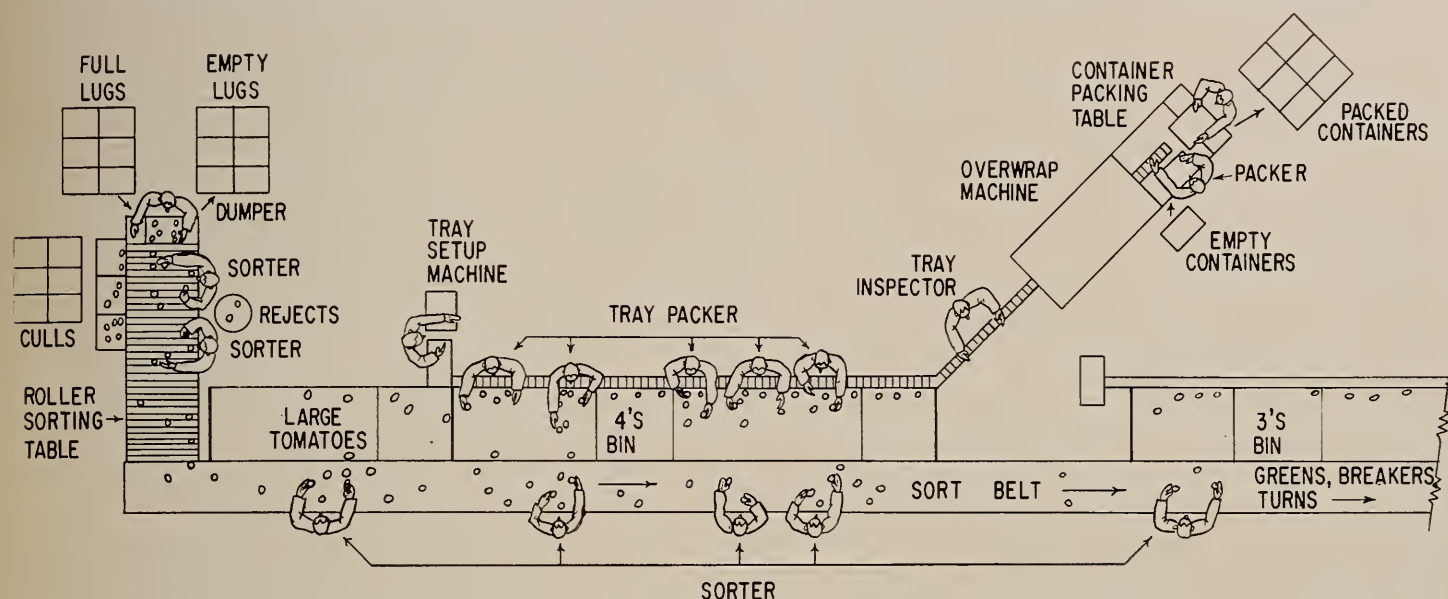
per hour at a cost of about \$40. Other repacking systems studied involved from a third to fifty percent higher costs. The recommended system, in this instance, would be applicable in a plant handling a daily volume of about 20,000 pounds.

According to the study, bruising, decay, and other defects account for losses of about 18 percent of the tomatoes handled by terminal market repackers. Marketing researchers suggested that bruising injuries could be held to a minimum by (1) minimizing

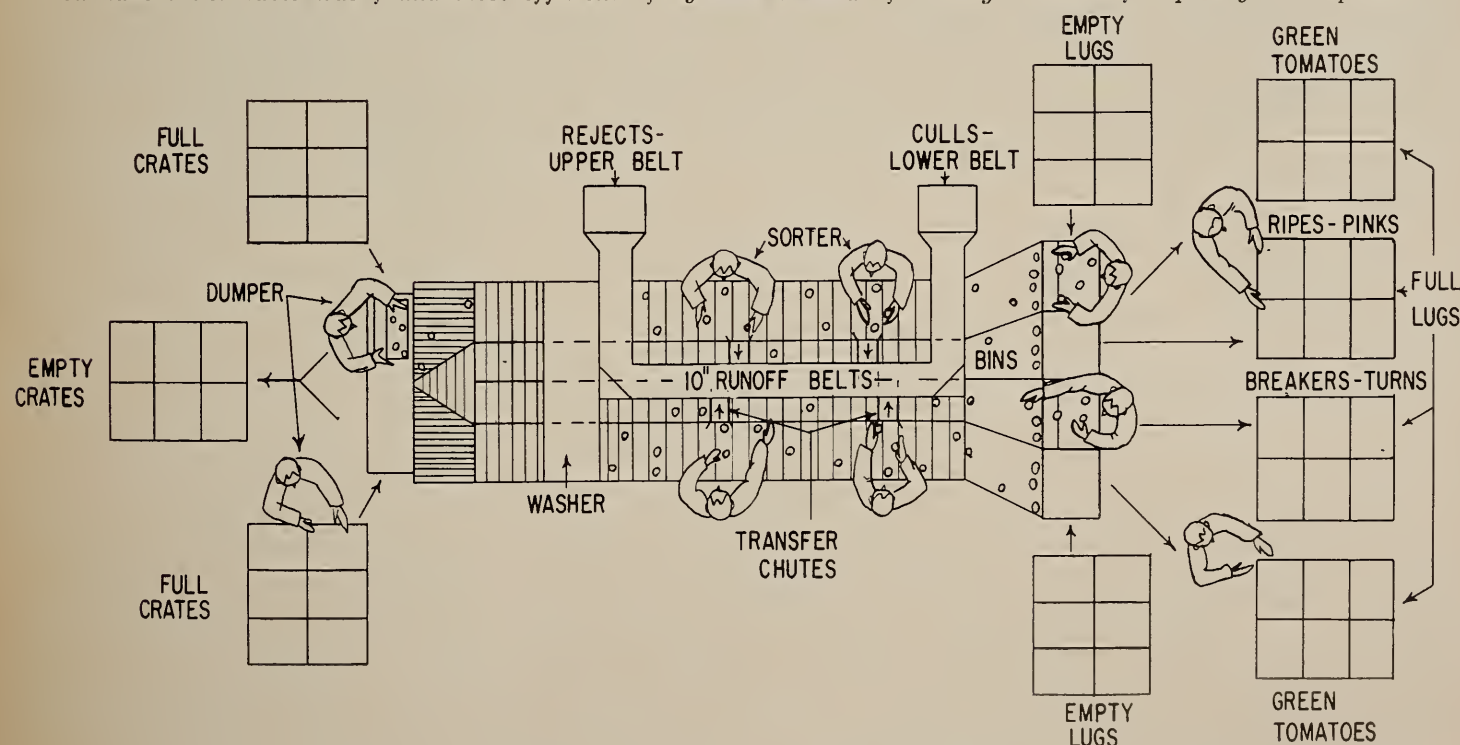
handling, (2) arranging equipment to reduce the distance that tomatoes drop when dumped or run off belts into bins or lugs, (3) using a soft lining such as covered foam rubber pads in bins and other containers, and (4) avoiding high stacking of overfilled containers.

Full details on the repacking study are given in Marketing Research Report No. 597, "Tomato Repacking Methods and Equipment." Single free copies are available from the Office of Information, USDA, Washington, D.C.

An efficient arrangement of workers and equipment in this 17-man crew, partial-fill, tray-packing system.



Four-lane roller table was found most efficient of systems studied of sorting tomatoes for quality and ripeness.



Inspection Serves Produce Packagers

THERE'S an axiom in the produce packaging business: "If you know the quality of the produce coming into your plant, then you know the quality of pack you can put out."

That's why some prepackagers have contracted with the Fruit and Vegetable Division of the Agricultural Marketing Service, U. S. Department of Agriculture to have an official inspector check all of their incoming fruits and vegetables. This "receipts inspection" tells them the exact quality and condition of the product they have received, and whether it meets contract terms. It also helps them determine how much regrading they will have to do, and any disease or condition problems they're likely to encounter.

These produce packers feel the inspection contract pays off for them in dollars and cents—as part of their regular business operations.

Receipts inspection is just one of several types of inspection service available to produce packagers from the Federal and Federal-State Inspection Services. The inspection services are provided by AMS and cooperating States agencies throughout the country.

Lot inspection is the most widely-used type of inspection service among produce packagers and among other segments of the industry, too.

Lot inspection can serve many purposes. Perhaps a packager at shipping point wants to have a carload of potatoes in 5-lb consumer packages inspected as a sales tool, or to assure the buyer that he's meeting contract terms.

A packager at a terminal market may want a rail car that's on the quality borderline inspected to find out if

it meets grade requirements.

In either case, an official inspector will check the produce and issue an official certificate stating its quality and condition. He'll base his report either on U. S. grades or on other contract specifications requested.

The cost of the service depends on the size of the lot or the amount of time it takes to make the inspection.

Continuous inspection is a third type of inspection that produce packagers can use. This is a special contract service designed to help the packager put out a quality pack—and to identify that quality for the consumer.

Continuous inspection means that one or more inspectors are assigned to the packing plant whenever it's operating. The inspector observes plant conditions and the preparation and packing of the product. He makes frequent quality checks at all stages of the packing—and then checks the finished packages against the grade or the specifications to make sure they measure up.

Fruits and vegetables that are packed under continuous inspection can carry the appropriate U. S. Grade, the official USDA quality shield, and the statement, "Packed under continuous inspection of the U. S. Department of Agriculture."

One of the big advantages of continuous inspection is that the inspector can alert the packager whenever the quality seems to be getting out of line. This gives the packer a chance to correct problems before they become serious and thus protect the quality of his pack.

Continuous inspection is available

on a contract basis to plants that meet rigid sanitation requirements.

All three types of inspection are available to produce packagers. They're provided at cost by AMS and the co-operating State agencies, to help the produce industry move fresh fruits and vegetables swiftly and efficiently from the farm to the consumer.

